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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/517,371

12/10/2004

Satoshi Oura

Q85303

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EXAMINER

PERILLA, JASON M

ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

08/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/517,371	OURA ET AL.	
	Examiner	Art Unit	
	Jason M. Perilla	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 1-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-9 are pending in the instant application.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on May 25, 2005 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Objections

3. Claims 1-9 are objected to because of the following informalities:

The following version of claim1 is presented to overcome objections to the claim:

1. A CDMA receiving device for estimating a signal power and an interference noise power of a received signal for each of a plurality of fingers, and combining a demodulated signal by using a signal-power-to-interference-noise-power ratio estimated from ~~these~~ the estimated signal power and interference noise power of each of the plurality of fingers, characterized by:

interference-noise-power calculation means (106, 206, 306, 406) for estimating an interference noise power for each of the plurality of fingers ~~in~~ during a current slot;

storage means (110, 217, 317, 425) for storing therein an estimated value for the interference noise power estimated for each of the plurality of fingers ~~in~~ during a last valid slot before a the current slot;

first averaging means (108, 208, 308, 408) for averaging, for each of the plurality of fingers, ~~an estimated value for~~ the interference noise power estimated ~~in a~~ during the current slot by said interference-noise-power calculation means for a finger (106, 206, 306, 406) and the estimated value for the interference noise power stored in said storage means (110, 217, 317, 425) during the last valid slot before the current slot for the finger to generate an averaged estimated value for the interference noise power;

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first judging means (115, 213, 313, 421) for judging ~~in which slot~~ when each of the plurality fingers ~~finger becomes valid~~ encounters a valid slot after a radio link is established; and

first switching means (112, 215, 315, 423) for coupling ~~storing the interference noise power in a current slot estimated by said interference noise power calculation means (106, 206, 306, 406) into~~ to said storage means (110, 217, 317, 425) based on a judged result by said first judging means (115, 213, 313, 421).

Appropriate correction is required.

4. Claim 7 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim can not depend upon another multiple dependent claim. See MPEP § 608.01(n).

Allowable Subject Matter

5. Indication of allowable subject matter is made regarding claims 1-9.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pub. No. 2002/0067761 to Kong et al.

U.S. Pat. No. 7106785 to Yoshida.

U.S. Pub. No. 2003/0223489 to Smee et al.

U.S. Pat. No. 6400780 to Rashid-Farrokhhi et al.

7. This application is in condition for allowance except for the following formal matters:

The claim objections above.

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Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 25 USPQ 74, 453 O.G. 213, (Comm'r Pat. 1935).

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Perilla whose telephone number is (571) 272-3055. The examiner can normally be reached on M-F 8-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Jason M. Perilla
August 13, 2007

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jmp

A handwritten signature in black ink, appearing to read 'Chieh M. Fan', with a stylized flourish at the end.

CHIEH M. FAN
SUPERVISORY PATENT EXAMINER